Residential Plans Review Checklist

BUILDING GENERAL:

- DESIGN LOAD [Table R301.2(1)]
  - Floor Live Load _____psf
  - Roof Live Load _____psf
  - Ground Snow Load _____psf
  - Basic Wind Speed _____mph (3-second gust)
  - Wind Exposure Category _____
- PLAT PLAN:
  - Less than or equal to 3' from property line-1 hour fire-resistance rating; no openings permitted
  - Less than or equal to 5' but greater than 3' from property line-1 hour fire-resistance rating; 25% of wall area permitted to be unprotected openings.
  - Aircraft noise zone
- GLAZING (R308)
  - Safety glazing locations
  - Skylight and sloped glazing
- GARAGES AND CARPORTS (R309)
  - Garage does not open into a sleeping area
  - Door between garage and residence-1 3/8" solid core or 20-minute fire-resistance rated
  - Garage floor - noncombustible; slopes to main door
  - ½" gypsum board on garage side between residence and garage
  - 5/8" gypsum board on ceiling and loadbearing walls of garage with habitable space above
- EGRESS (R310 THRU R316)
  - Exit door (minimum 3'- 0" X 6'- 8")
  - Exit hallway (minimum 3'- 0" width)
  - Stairways
    - Minimum width (3'- 0")
    - 8 1/4" maximum riser; 9" minimum tread width
    - Headroom (minimum 6'- 8" from nosing)
    - Landing (minimum 36" in the direction of travel)
    - Winder, spiral, circular
    - Illumination
    - Under stair protection (1/2" gypsum board on all exposed framing)
    - Handrail (34" – 38" high; 4" picket spacing)
    - Guardrail (porches, balconies, open side of stairs or raised floors >30") 34" – 36" high, 4" picket spacing
- SMOKE ALARMS (R317)
  - Location and power source
- DWELLING UNIT SEPARATION (R321)
  - Two family dwelling (1-hour fire-resistance rating)
  - Townhouse (2-hour fire-resistance rating)
    - Continuity
    - Structural independence
    - Penetration protection
- MOISTURE VAPOR RETARDERS (R322)
- FLOOD RESISTANT CONSTRUCTION (R 327.1)
  - Hazard area (A zone or V zone)
  - Elevation certification
  - Electrical/mechanical equipment location

FOUNDATION:

- CONCRETE COMPRESSIVE STRENGTH (R403.2)
- FOOTING (R403)
  - Soil type and bearing
  - Minimum width (Table R403.1)
  - Edge thickness (6" minimum; projection 2" minimum but not greater than footing thickness)
  - Depth below grade
  - Foundation anchorage (R403.1.6)
- FOUNDATION WALL (R404 THRU R406)

Masonry wall (maximum height; minimum thickness; reinforcing size and spacing)
Sill plate size (anchor bolt ½" diameter, 7" embedment, 6'- 0" o.c. maximum, 12" from corners)
ICF (R404.4)

- COLUMNS (R407)
  Decay and corrosion protection
  Structural requirements
  Anchorage
  Wood columns (minimum 4" square; R407.3)
  a. Steel columns (minimum 3" diameter, standard weight; R407.3)
- UNDERFLOOR SPACE (R408)
  Ventilation (1 square foot / 150 square feet of space; one opening 3 feet from each corner)
  Access (minimum 18" x 24" or Mechanical requirement)
  Flood resistance (R408.6)

FLOORS:

- WOOD JOIST AND GIRDERS (R 502)
  Live load (sleeping areas-30psf; nonsleeping areas-40psf)
  Girder and header span [exterior bearing walls-Table R502.5.(1); interior bearing walls-Table R502.5.(2)]
  Joists under bearing partitions
  Bearing (11/2" minimum on wood or metal; 3" on masonry or concrete); joist lapped 3"
  Pre-engineered floor system (registered design professional)
  Draftstopping
  Sheathing
  Insulation (R-19 minimum)
  Slab-on-grade
    - Thickness (3 1/2" minimum; concrete strength)
    - Subgrade (8" maximum earth fill; 24" sand and gravel)
    - Vapor retarder (6 mil minimum between slab and fill)
    - Insulation (R-4.5; 24" total length)

WALLS:

- WINDOWS IN WIND BORNE DEBRIS REGIONS (R301.2.1.2)
- WOOD CONSTRUCTION (R602)
  Stud spacing (2-stories or less- 2X4 @ 16" o.c.; over 2-stories- 2X6 @ 16" o.c. or 2X4 @ 12" o.c.)
  Interior bearing walls
  Headers
  Fireblocking
  Braced walls (R602.10.1 & 602.10.4)
- STEEL WALL FRAMING (R603)
- SHEATHING (R604 & R605)
- MASONRY CONSTRUCTION (R606 THRU R610)
  Design
  Grouted masonry
  Glass unit masonry
- INSULATING CONCRETE FORM WALL CONSTRUCTION (R611)
  Design
  Type of ICF
  Construction requirements
- WINDOWS AND DOORS (R613)
  Performance (fire rating; STC, U-value)
- INSULATION
  Minimum R-value (R-13)

ROOF-CEILING:

- ROOF FRAMING (R802)
  Rafter tie (4'- 0" o.c.)
  Purlins (2X4 @ 4'- 0" o.c.)
  Bearing (1 ½" on wood or metal; 3" on masonry or concrete)
  Pre-engineered elements (registered design professional)

Hurricane ties (each end of each rafter or truss)

- CEILING JOISTS [Tables R802.4(1), R802.4(2)]
  Design loads (without storage- 10psf; with storage- 20psf)
  Span, spacing and size
- RAFTERS [Tables R802.5.1(1) thru R802.5.1(8)]
  Design loads (ground snow- 15psf; live load 20psf with or without ceiling attacheds)
  Span, spacing and size
- SHEATHING (R803.2)
  Thickness
  FRTW (reduced spans)
- STEEL FRAMING (R804)
- ROOF VENTILATION (R806)
  Minimum area (1 square foot / 150 square feet of attic area or 1 square foot / 300 square feet of roof area with high and low vents)
- ACCESS (R807)
  Minimum size (22" X 30")
- INSULATION (R906)
  Minimum R-value (R-23 at ceiling joists; R-30 for cathedral ceiling)
- WEATHER PROTECTION (R903)
  Flashing
  Roof drainage
- ROOF COVERINGS (R905)

CHIMNEYS AND FIREPLACES:

- Masonry fireplace (R1003)
- Factory built fireplace (R1004)

ENERGY CONSERVATION:

- Building envelop (N1102)
- Mechanical systems (N1103)
- Service water heating (N1104)